## INSECT UPDATES

#### PECAN PRODUCTION MEETINGS

**Angel Acebes-Doria and Will Hudson** 

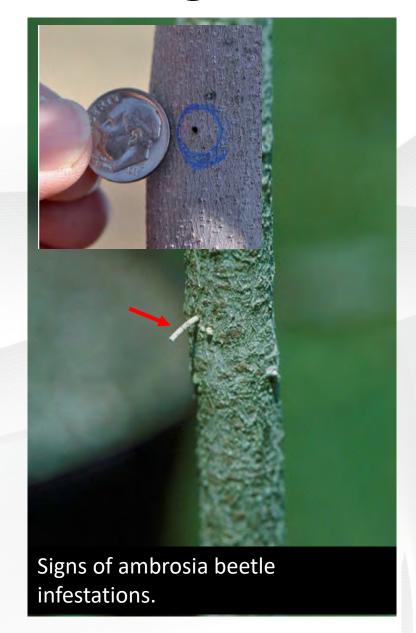


## **AMBROSIA BEETLES**

Ambrosia beetles collected from young infested pecan trees in Georgia.



- ➤ Vulnerable Trees: young and stressed (especially under flooded conditions)
- Trees can recover, but the more the attack, the higher the possibility trees could die
- Immediate action is vital in saving the tree



## Asian/Granulate Ambrosia Beetle

# Xylosandrus crassiusculus

## Black Stem Borer



- Native to SE Asia
- > Pest of ornamental nurseries and tree fruit
- Attack many tree species >120 species (GAB), >200 species (BSS)
- Hosts: Dogwood, honeylocust, oaks, magnolia, maple, redbud, apple, conifers
- They do not feed on the tree, they only excavate the tree to grow a fungus that they use as food.
- They are very attracted to <u>ethanol</u>.
- Females are active flyers and they are the ones captured in ethanol traps
- > They are low flyers (position traps less than 1 m from the ground)

### **AMBROSIA BEETLE MONITORING**



- Bolt of wood with a drilled hole in the middle
- Pour <u>ethanol</u> into the hole; cover with cork
- Deploy traps along woodlines next to orchards by early Feb in south GA
- Traps indicate beetle activity, check traps for 'toothpicks' and/or holes
- ➤ When attacks are detected, treat infested trees with **pyrethroids** using a hand gun (repeat applications after 7-10 days)

## Holes not made by Ambrosia **Beetles**









#### OTHER EARLY SEASON INSECT PESTS



- Spray at budbreak (1st pre-pollination Spray)
- Orchards with previous history of infestation, spray with imidacloprid
- Time sprays before the insects are enclosed by the galls
- Too late to spray once damage is observed



- Vulnerable: trees that are leafing out
- Scout for bud moth damage in young trees
- ➤ If symptoms are observed, use caterpillar-targeted materials such as Intrepid
- ➤ Time application before caterpillars bore into the shoots

## LATE-SEASON INSECTICIDAL TRIALS: APHIDS AND MITES SCOUT AND APPLY ONLY IF NEEDED!

#### **Yellow Aphids:**

Nexter (11 oz/A), Movento (8 oz/A\*), Carbine (2.8 oz/A\*), Closer (2.75 oz/A\*)

#### Black aphids:

Nexter (11 oz/A\*), Closer (2.75 oz/A\*), Magister (24 oz/A\*)

#### Mites:

Carbine (2.8 oz/A\*), Magister (24 oz/A\*), Nexter (11 oz/A\*), Closer (2.75 oz/A\*)

(\* Sprayed with Humispread as an Adjuvant: Optional)



EARLY IN THE SEASON: HOLD OUT SPRAYING FOR APHIDS! DO NOT USE PYRETHROIDS OR LORSBAN TO CONSERVE BENEFICIAL INSECTS!

## **Common Beneficial Insects**

#### **Lacewing**









**Lady Beetles** 





### **Common Beneficial Insects**

#### **Pirate Bugs**



Nymph feeding on aphid





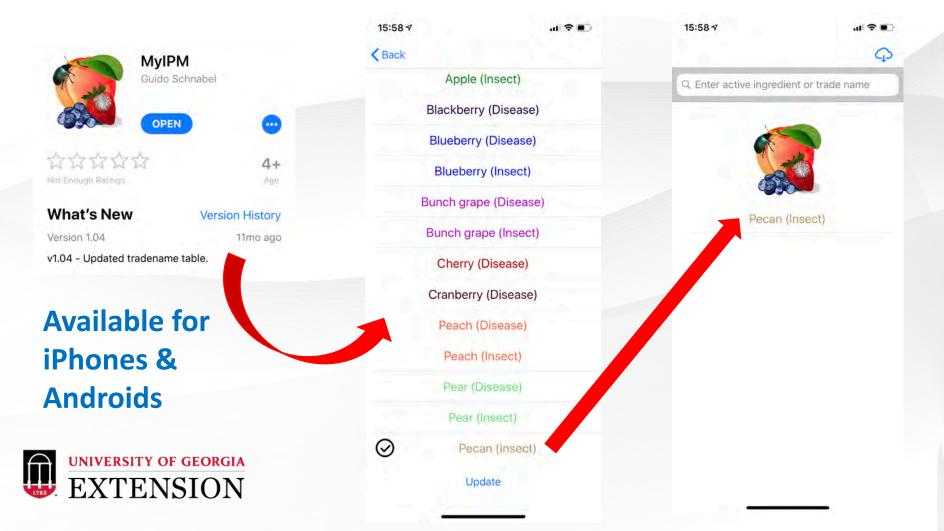


## **Take Home**

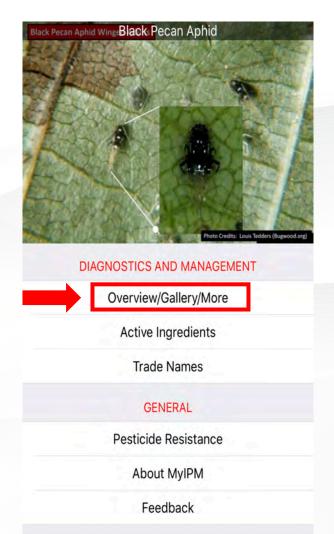
- > Scouting is very important.
- > Assess infestation levels and only treat if needed.
- > Timing of application is important.
- ➤ If you choose to control for insects early in the season, try to avoid pyrethroids and chlorpyrifos to help conserve beneficial insects.



## MyIPM App: Free Mobile App with Info on Pecan Pests & Their Management

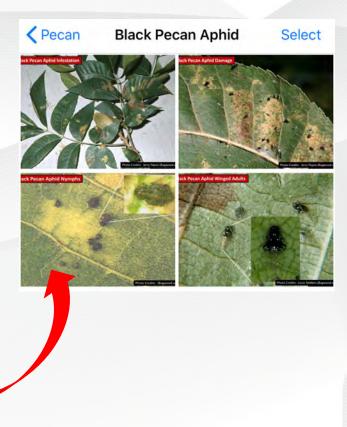


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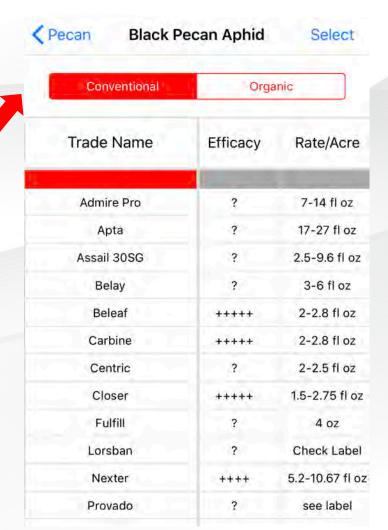


## **Pictures**



## MyIPM App: Free Mobile App with Info on Pecan Pests & Their Management





## **Extension Programs**

## Acknowledgment



**March 27 (Tifton Conference Center)** 

**New Pecan Grower School:** 

**April 16 (Tifton)** 

Field Day:

First Thursday of September

**Location: Grower Farm** 

Website:

www.ugapecan.org

**Blog:** 

https://site.extension.uga.edu/pecan/



Georgia Pecan Commodity Commission

#### **MyIPM App Collaborators:**

Guido Schnabel (Clemson University)
Brett Blaauw (UGA)



#### **Tree Nut Entom Lab:**

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Taylor Davenport (Forest Entomology)